

DOCUMENT RESUME

ED 274 932

CG 019 436

AUTHOR Price, Richard H.; Caplan, Robert D.
TITLE Theory Driven Intervention Research on Stress and Coping.
PUB DATE 22 Aug 86
NOTE 13p.; Paper presented at the Annual Convention of the American Psychological Association (94th, Washington, DC, August 22-26, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Coping; *Intervention; Mental Health; Models; *Psychological Studies; Psychology; *Social Support Groups; *Stress Management; *Unemployment

ABSTRACT

Field research on the relationships among environmental stressors, psychological reactions, and health outcomes has either been correlational or of a program evaluation nature. Neither of these alternatives is satisfactory for testing hypotheses concerning the causal status of variables in process models of stress coping. A theory driven randomized field experiment was used to test a model of stress and coping with job loss. The programmatic hypothesis was that vigilant coping and social support are needed for making and implementing difficult decisions such as those following job loss. These elements were combined to generate an intervention protocol. The experimental treatment included training in vigilant coping during job search and provided specific forms of social support hypothesized to promote internalization of vigilant coping patterns. The experimental condition added peer support in the form of pairs of employed participants who telephone each other frequently to discuss their efforts during the intervention program. The experiment included outcome measures such as job seeking and intervening variables including social support and social undermining which are linked by a process model. The longitudinal panel design that surrounds the intervention allowed the testing of a number of hypotheses concerning the effects of the intervention and other variables on mental health, and on active coping with unemployment through job seeking behavior. Although data collection is not complete, it is hoped principles of intervention useful for coping with stress will be derived. (ABL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

Theory Driven Intervention Research

On Stress And Coping*

Richard H. Price and Robert D. Caplan

University of Michigan

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Richard H. Price

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

☐ Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

*This paper was presented as part of a symposium titled
"Rethinking Job Stress" at the American Psychological
Association, August 22, 1986, Washington, D.C.

Overview

More field research on the relationships among environmental stressors,
psychological reactions, and health outcomes has either been correlational in
nature or, when experimental, of the "program evaluation" variety in which a
conglomerate program is tested in a field experiment. Neither alternative is
entirely satisfactory for testing hypotheses concerning the causal status of
variables in process models of stress coping and mental health.

In this paper we describe a theory driven randomized field experiment
designed to test a process model of stress and coping with job loss. My
colleagues Bob Caplan, the Principal Investigator of the project, Amiram Vinokur
and Michelle VanRyn are collaborators in the project. The programatic
hypothesis is that vigilant coping is necessary for making and implementing
difficult decisions such as those involved in career transition following job
loss. Social support is also critical. The key elements of these constructs
and their influence have been identified by our own work and by Janis. We have

BEST COPY AVAILABLE

combined these elements to generate an intervention protocol. The experimental treatment includes training in vigilant coping during job search and provides specific forms of social support hypothesized to promote internalization of vigilant coping patterns. The experimental condition also adds peer support in the form of pairs of employed participants who phone each other frequently to discuss their efforts during the intervention program.

Our experiment includes outcome measures of mental health and well being, indicators of coping such as job seeking, and intervening variables including social support and social undermining. Our evaluation of the intervention is guided by a process model that links these variables together. The longitudinal panel design that surrounds the intervention allows the test of a number of hypotheses concerning the effects of the intervention and other variables on mental health, and on active coping with unemployment through job seeking behavior. We believe theory driven intervention research of the kind we describe here provides a next important step in testing hypotheses regarding stress and coping in the context of field experiments.

Theory Of The Intervention

Figure 1 provides a programatic framework which is the process model for our intervention. It shows the hypothesized links from a number of variables to emotional states and to career relevant coping behavior.

Emotional States. Emotional states such as anxiety, depression, and anger can be caused by frustrated attempts to achieve goals including reemployment. The search for jobs and related alternatives such as deciding to forego employment in order to retrain can produce. These affective states. During the

career transition period from unemployment to employment, social support may have direct effects on emotional states. There is some evidence that social support can have important effects on emotional health in a variety of work and non-work settings. These findings suggest that the intervention should attempt to reduce or prevent the development of incapacitating anxiety and depression and prevent people from making ineffective or premature decisions as well as to build in social support sources.

Motivation and Behavior. Our intervention also addresses the motivation to seek reemployment in order to produce active coping. The extent to which a person engages in job search behavior, is determined by their motivation to do so and the quality of that behavior is a function of abilities, skills and knowledge possessed by the person. Thus, we have the well known formula: effective behavior = motivation X ability.

And following Fishbien and his colleagues, the most immediate precursor of behavior is intention in this model. Consequently, measures of intention are relevant here. In addition, in keeping with value expectancy theories, motivation is defined as a multiplicative function of the perceived instrumentality of various acts to produce certain outcomes and of the valence of the respective outcomes.

We also hypothesize that the emotional states can influence perceived instrumentality. For example, a deeply depressed or anxious person may feel low self efficacy about being able to perform a particular behavior that is instrumental to coping adequately with tasks of reemployment. Measuring those emotional states as well as components of motivation are part of the design and allow a direct test of the hypothesis.

Social Support. We also hypothesize that social support has direct effects on emotional well being. Informational support can provide knowledge and corrective feedback regarding performance of job pursuit behaviors, and buffering may occur as well when social support influences a variable that intervenes between the stressor and the strain.

In sum, our proposed process model depicts social support as having pervasive effects on the capacity to cope with the stressful tasks of job search. Furthermore, we felt the intervention must be aimed at influencing the various components of motivation as well as the knowledge and skills required to perform motivated acts satisfactorily. The intervention must also be designed to deal with the emotional states of the individual, feelings of anxiety, resentment, and depression that may be part of the experience of job loss and coping with it.

The Intervention: Vigilant Coping and Buddy Support

The unemployed people (from the Michigan Employment Security Commission) in this study have been randomly assigned to intervention conditions and are invited to participate in a job counseling program that requires their attendance in a series of eight half day sessions. Three hundred people participated in the program. There were in addition 379 controls who received self-administered materials. In each session, the same group of 20 unemployed persons participate in a structured curriculum provided by two professional trainers. In all there were 15 replications of the experiment. The trainers have been specially trained to guide the group through discussions using structured agendas and materials.

In addition, a random subset of these groups were assigned to a buddy condition in which each unemployed participant is paired with another from the same group for the purpose of providing support while going through the difficult experiences of decision making and job seeking. Buddies are asked to maintain contact with each other at least by telephone throughout the intervention. Data are collected one week before intervention, 4 weeks and 4 and one-half months after the intervention. Response rates are in the eighty-five to ninety percent range.

The two critical elements in the intervention are the establishment of what Janis calls "referent power", that is, the enhanced supportive capacity of trainers critical in helping relationships and the teaching of a decision making framework that helps participants to engage in what Janis calls vigilant coping.

Counselors were trained in the principles and skills of establishing referent power with participants as described by Janis. Using role playing techniques, counselors learn the appropriate use of self-disclosure, use of reinforcing statements and norm setting communications that increase both the credibility and the perceived supportiveness of trainers.

Vigilant coping and informed decision making is taught to all participants using five steps which involve: (1) appraising the challenge of job seeking by assessing accurate information about the nature of the job market, how jobs are procured in reality, and future labor market information (2) surveying possible job and retraining alternatives available to participants (3) weighing those alternatives using balance sheet techniques (4) deliberating about commitment to their decisions about job seeking and building contingency plans to insure

success of the new decision and (5) attempts to establish strategies for continuing to cope in the face of negative feedback, by anticipating and reinterpreting the meaning of setbacks.

We feel that the intervention is unique in that it originates in a theoretical framework, and thus, its aim is to generate principles of intervention rather than to test a specific intervention per se. We believe that these principles will be of wider scientific value than findings we might obtain regarding whether this particular intervention is superior or worse than any other intervention. For this reason, we have opted to invest heavily in careful measurement of all the parameters in the theoretical model and careful design of the intervention to represent particular theoretical parameters we and other researchers feel are important in helping people make and adhere to difficult decisions. In this way, we hope to systematically evaluate the extent to which each element in the intervention makes a relatively important or unimportant contribution to overall treatment effects.

Methodological Issues

Knowing that a multi-faceted program worked or failed will not tell us which of its many facets were critical in producing the results. Nor will such a finding tell us much about the process by which the effects occurred. In addition, field experiments are inevitably limited in the number of independent experimental conditions that can be established. In fact, in many cases, it is not possible to create explicit separate experimental conditions for each variable because of practical considerations.

Our approach involves preserving some elements of the experimental design

and embedding the experiment within a longitudinal panel design. The experimental design with its random assignment to conditions provides valuable overall programatic evaluation. The longitudinal panel analyses allows us to capitalize on the natural variation in the delivery of independent variables within groups. For example, we did not randomly assign people to a high or a low condition of the trainers referent power or capacity to engage in supportive behavior. Nevertheless, our analyses will be able to assess this effect by analyzing observer and participant ratings of trainer referent power and supportiveness to estimate the effects of such supportive power on the mental health of people within the experimental group.

Of course, some variables have a continuous distribution both across experimental and control conditions even though they are not a direct component of the experimental manipulation. These variables can be analyzed with the panel analysis which pools all respondents. For example, we will be able to test the hypothesis that social support from a significant other such as a spouse or a close friend increases the unemployed person's motivation to seek a job. Longitudinal regression analyses can be used for the combined set of control and experimental respondents because measures of these variables were obtained at pre and posttest from all respondents.

Since some independent and intervening variables have not been randomly assigned in the panel design portion of the study, there is always the possibility that unmeasured third variables or other causal models not considered can explain the result. We believe the best way to deal with this sort of equivocation is to derive multiple predictions that would examine the plausibility of rival hypotheses.

As in illustration, we all know that there is currently controversy surrounding the hypothesis that social support improves mental health. Our experiment randomly assigns people to a condition in which many types of social support are provided or to a control condition in which only a booklet on job seeking skills is provided. At the global level, we can test the social support hypothesis by seeing if the experimental group shows more improvement in mental health.

But part of the controversy deals with the observation that, in longitudinal random sample studies of populations, there are cross-sectional positive correlations between social support and mental health, but there tend to be few or weak longitudinal effects of social support on mental health. These latter findings have been offered as support for the hypothesis that perceived social support is a personality trait of the recipient or that that individual states of mental health can influence ones perceptions of social support from others.

We cannot address this controversy by the random assignment to treatment in our experiment since the experiment and perhaps all experimental arrangements inevitably confound social support with other variables so the differences in mental health could be due to any one of a number of elements in the experiment.

We can, however, explore the plausibility of some of these hypotheses within the experimental group. For example, we can compare the fit of the data to alternative analytic models of these processes. One such model might examine the effects of the initial state of mental health among experimental participants on how the observed amount of trainer social support (defined

operationally as the mean rating of that support by all other members of the group) predicts to the person's perceptions of social support. A competing model might omit initial state mental health as a variable.

Conclusion

The final wave of data collection is just being completed so we will soon know whether our theory driven approach to intervention research or stress and coping was worth the effort.

We have placed our bets on (1) an attempt to articulate a process model of coping with a particular job related stressor, the job search process itself, (2) careful measurement of the elements of the model and (3) manipulation of some of those elements in a randomized field experiment. Finally, (4) by assessing variation in these elements in a longitudinal panel design, we hope to derive principles of intervention that are more generally useful for coping with a range of stressful decisions, both within and outside the work domain.

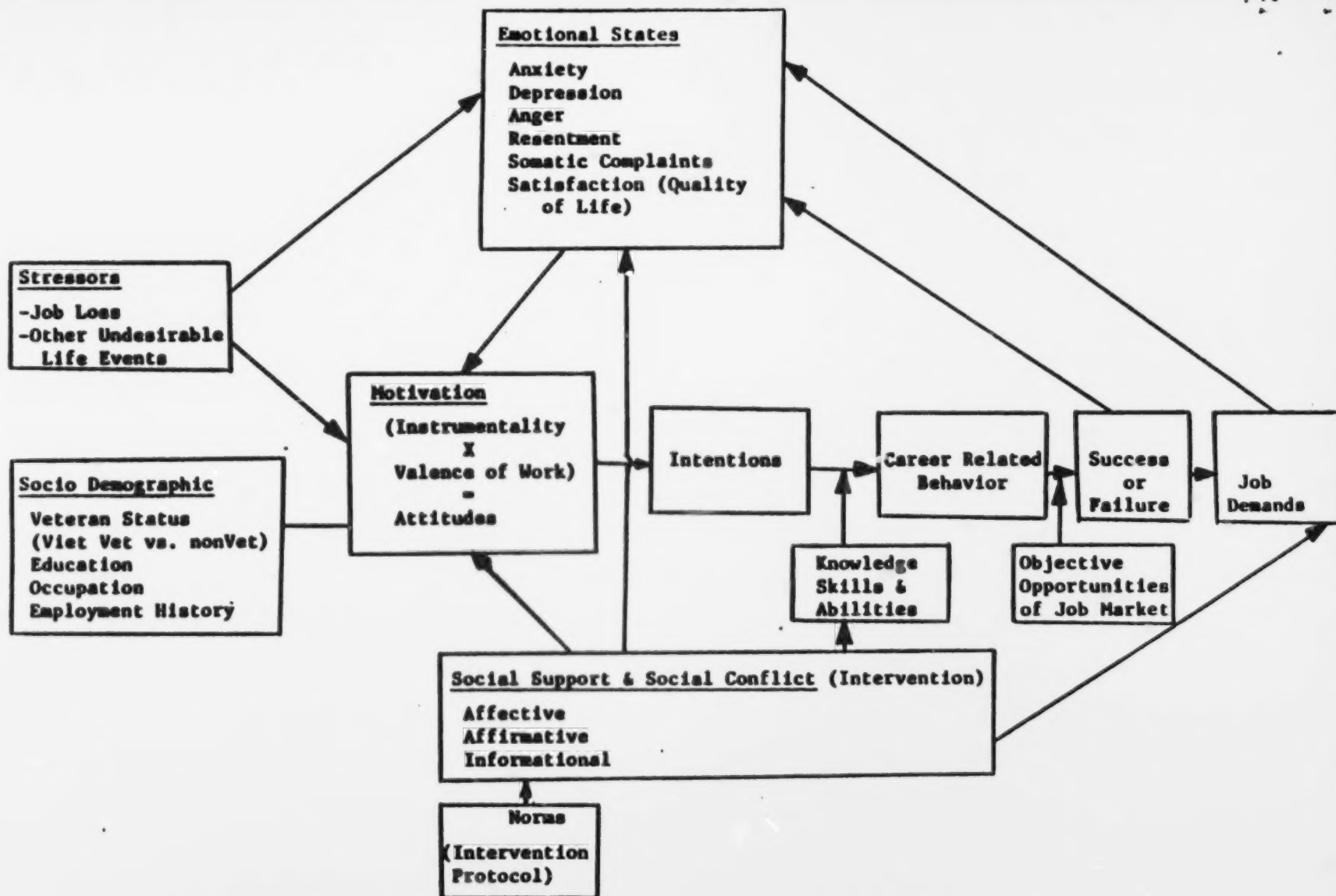


Figure 4. Hypothesized effects of social support on motivational, knowledge, and emotional states relating to job loss. For simplicity's sake, not all arrows or derivable paths are shown. Certain sociodemographic risk factors (e.g., veteran status) are shown in a separate box. Their moderating affects are examined systematically.

REFERENCES

Theory Driven Intervention Research On Stress and Coping

- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.
- Janis, I.L. (1983). The role of social support in adherence to stressful decisions. American Psychologist, 38, 143-160.